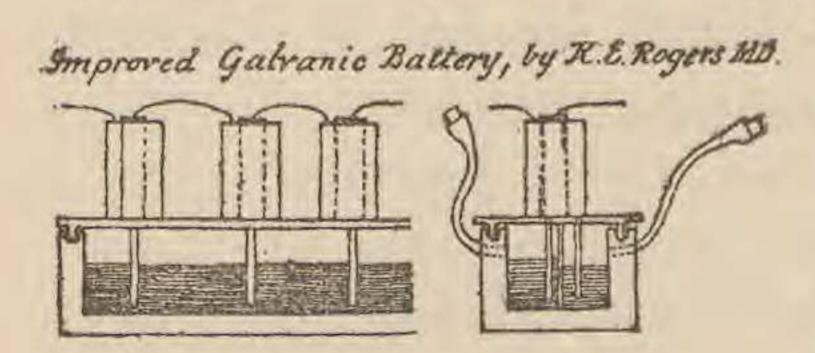
Galvanic Battery; and also an improved method of analyzing irons and steels for their contained carbon, by the use of bichromate of potassium:

The wood-cut represents a trough, on which stands the battery of cups.



E STATE OF THE STATE OF

A pair of tubes descend from each cup, through the lid of trough, into the liquids. The trough is divided lengthwise by a diaphragm. The tubes of each pair descend one on each side of the diaphragm. The lid of the trough is made air-tight, by the following arrangement: A groove is sunk in the upper edge of

of the four walls of the trough, and a bead to fit the groove runs round the under side of the lid near the edge. The groove being half filled with mercury, the joint is kept air-tight by the weight of the lid and battery. An India-rubber pipe enters the trough, and the breath (or a bellows) is sufficient to cause the liquids to ascend into the cups of the battery during work. After work, the cork is withdrawn from the mouthpiece of the India-rubber tube, and the liquors fall back into the trough. The lid and battery can then be removed and washed.

Mr. Lesley described the faulted structure of the district around Embreeville, in East Tennessee; and exhibited a suite of European iron ores, owned by Mr. Thomas Graham, and another of the ores of North Carolina.

Prof. Cope described the sightless fauna of the Mammoth, Wyandotte, and other Caves.

Pending nominations, Nos. 693, 694, 695, were read, And the meeting was adjourned.

Stated Meeting, May 17th, 1872.

Present, 13 members.

Vice-President, Mr. FRALEY, in the Chair.

A letter accepting membership was received from Professor Guillaume Lambert, dated Bruxelles, Rue Traversière, No. 78, April 30, 1872.

A letter acknowledging receipt of Transactions, XIV., i.ii., and Proceedings, 78–85, was received from Professor Paolo Volpicelli, dated del Campidoglio, Roma, Reale Acc. d. Lincei, December 12, 1871.

A. P. S .- VOL. XII.-3D

Donations for the Library were received from Gehe & Co., of Dresden, the Revue Politique, London Nature, the R. Astronomical Society, Cambridge Museum of Comparative Zoölogy, Boston Society of Natural Sciences, Buffalo Young Men's Association, Dr. Geo. B. Wood, Mr. Sol. W. Roberts, the Medical News, Penn Monthly, Petroleum Monthly, Wilmington Institute, and U. S. Corps of Engineers.

Professor Chase exhibited an annual Auroral Curve and explained its relations to the periodic maxima and minima of

meteoric displays, &c.

Professor Chase exhibited a drawing to illustrate the capacity of Mr. Holman's pen to draw continuous lines of any length and thickness.

Professor Chase then gave in tabular form, various recently

calculated planetary relationships.

Dr. Rodgers described his manner of obtaining an unlimited supply of electricity by the steam jet from a high-pressure boiler, not insulated, and in all weathers.

This gave rise to a discussion of electrical phenomena

during volcanic eruptions and earthquakes.

Pending nominations, Nos. 693 to 695, and new nomination, No. 696, were read,

And the meeting adjourned.

Stated Meeting, June 21, 1872.

Present, 8 members.

Vice-President, Mr. Fraley, in the Chair.

Photographs for the Album were received from Dr. Ed. Jarvis of Dorchester, Mass., Dr. Elisha J. Lewis of Philadelphia, and Judge W. H. Lowrie, of Meadville, Pa.

A letter accepting membership was received from M. Léon

Say, dated Paris, 10th May, 1872.

Letters, acknowledging receipt of publications, were received from the Hungarian Academy, May 4, 1872 (XIII.,